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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Morten Moen

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EXAMINER

NGO, NGUYEN HOANG

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/856,643	Applicant(s) MORTEN MOEN	
	Examiner Nguyen Ngo	Art Unit 2663	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 4-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                                   |                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                              | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities:

On page 4 of the specification, there is a typo, the “the ring in question whilst maintaining” should be - ring in question while maintaining.

On page 8 of the specification, there is a typo, the “source will send one of the spear bits in time slot 0” should be - source will send one of the spare bits in time slot 0.

Appropriate correction is required.

### *Claim Objections*

2. Claim 1 is objected to because of the following informalities:

As for claim 1: The “the ring in question whilst maintaining” in line 16 should be - the ring in question while maintaining.

Examiner believes there to be a typo.

As for claims 1-11, there seems to be extra spacing between the words of characterized. Examiner believes there to be a typo.

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Appropriate correction is required.

3. Claims 4-11 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim *cannot depend from any other multiple dependent claim*. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

**Regarding claim 1**, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

**Regarding claim 2**, the phrase "i.e. " renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1 and 2 are rejected under 35 U.S.C. 102(a) as being anticipated by Yoshida et al. (US 5,796,720) hereinafter referred to as Yoshida.

**Regarding claim 1**, Yoshida discloses a method for fault monitoring and fault reporting on the transmission lines of the ring LAN which includes duplexed ring transmission lines and a plurality of communication controlling devices or nodes (method for establishing alternative routes in a telecommunication network, especially in the case of transmission failure, wherein said network is arranged in one or more initial rings including duplex operation between the nodes included in each ring, Abstract). Yoshida further discloses:

the ring LAN includes a plurality of nodes and duplexed lines, 0-system and 1-system (col6 lines 60-63), in which the 0-system is used as the current transmission line and the 1-system is used as a spare transmission line (all time slots be transmitted in one and the same direction (OK direction) of the ring while maintaining the opposite direction (ERROR direction) as a standby path, figure 24 and col1 lines 23-27).

Yoshida further discloses monitoring cells which are periodically outputted at predetermined intervals, and that each node can detect and report a fault occurring in the transmission lines by monitoring the monitoring cell, in which the communication controlling section considers that a fault occurs in the current transmission line, and applies to the system selection controlling section an instruction to switch the system

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currently selected (switch to standby, col14 lines 46-50). It is also disclosed that a cell inserting section inserts a cell (monitoring cell) into a given time slot of a synchronous frame (standby path until alerted by a specific time slot reflecting the occurrence of a fault, col10 lines 60-67, col7 lines 42-45).

that the monitoring cells are outputted to the 0-system and 1-system transmission lines (figure 4 and col10 line52-55) and that when a monitoring cell passes through a node, the node writes a "1" in the one bit area. By checking the one-bit areas flagged with "1", it is possible for fault detection (providing a time slot with alerting means that are adapted to monitor each section in the ring in question for both directions, said alerting means being defined by the bit configuration of said time slot, col11 20-30).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 2 is rejected under 35 U.S.C. 103(a) as being anticipated by Yoshida et al. (US 5,796,720) hereinafter referred to as Yoshida.

**Regarding claim 2**, Yoshida discloses all the limitations as discussed in the rejection of claims 1. Yoshida discloses monitoring cells are outputted from a node over the 0- and 1-system transmission lines (each node is provided with detection means adapted for detecting a section transmission fault both in the incoming or at the outgoing ports, col10 lines 52-54). It should be obvious to a person skilled in the art that the 0-system and 1-system correlates to the incoming and outgoing ports.

10. Claims 3 is rejected under 35 U.S.C. 103(a) as being anticipated by Yoshida et al. (US 5,796,720) in view of Mahajan et al. (US 6,618,358), hereinafter referred to as Yoshida and Mahajan.

**Regarding claim 3**, Yoshida discloses all the limitations as discussed in claim 2 but fails to disclose that fault criteria determine the re-routing of the time slots: Loss of Incoming Signal, Loss of Frame Alignment, and Remote Alarm Indication.

Mahajan discloses of a Loss-of-signal alarm, which becomes active when there is loss of the incoming signal (col1 line45-46). Mahajan further discloses other performance indicator signals, which are alarm-indication signal, and lost frame alignment, among others (fault criteria, Loss of Incoming Signal, Loss of Frame

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Alignment, and Remote Alarm Indication, col2 line60-65), thus providing the motivation to provide indicating signals to indicate a transmission fault and what type of fault it is.

It would have thus been obvious to a person skilled in the art to incorporate the performance indicator signals disclosed by Mahajan with the method for fault monitoring and fault reporting on the transmission lines disclosed by Yoshida to provide the criteria to determine what a transmission fault is.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Magill et al. (U.S 6,606,297), Bi-Directional Ring Network Having Minimum Spare Bandwidth Allocation And Corresponding Connection Admission Control.

b) Saito (U.S 5,920,543), Double Ring-Type Local Area Network System Capable Of Switching Transmission Paths Without Interruptions.

c) Ohare (U.S 5,495,472), Methods and Apparatus For Utilizing Protection Paths As Additional Working Paths In a Switched Ring Network Systems.

d) Ogura. (U.S 5,517,489), Synchronous Digital Hierarchy 2-Fiber Ring Having a Selective Protection Function.



e) Chaudhuri (U.S 5,745,476), Errorless Switching Techniques In Ring Network.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen Ngo whose telephone number is (571) 272-8398. The examiner can normally be reached on Monday-Friday 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

W.N  
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*Ricky Ngo*  
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PRIMARY EXAMINER

*8/12/05*